

Pulmonary rehabilitation closer to patients – feasibility and effectiveness study

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Pulmonary Rehabilitation (PR) remains highly inaccessible to patients with chronic respiratory diseases (CRD). We assessed the effects of a minimal-resource community-based PR programme in patients with CRD.

Seventy-seven patients (48 male; 68±11yrs; 57.7±22.2% FEV1%predicted; 80.3±19.6 FVC%predicted) with COPD (n=52), asthma (n=13), asthma-COPD overlap (n=3), interstitial lung disease (n=7), lung transplant due to COPD (n=1) and bronchiectasis (n=1) participated in a 12-week community-based PR programme. The modified Medical Research Council–dyspnoea scale (mMRC), Saint George’s Respiratory Questionnaire (SGRQ), quadriceps muscle strength with hand-held dynamometry (QMS), 1-minute sit-to-stand (1-minSTS), six-minute walk test (6MWT), Brief Balance Evaluation System Test (Brief-BESTest) and Hospital Anxiety and Depression Scale (HADS) were collected pre/post PR. Differences were examined using the Student’s t-test/Wilcoxon test and effect sizes (ES) were calculated. The number of patients improving above the minimal clinically important difference (MCID) was established, whenever a MCID was available.

Significant improvements were observed (Table 1). The number of patients above the MCID were: 33 in mMRC (1 point), 47 in SGRQ (4 points); 41 in 1min-STS (3 repetitions); 50 in the 6MWT (25m), 18 in the Brief-BESTest (4.9 points) and 32 and 28 in the HADS Anxiety and Depression scores (1.5 points).

Community-based PR programmes are feasible and effective in patients with CRD.